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Notes on ARADIDAE in the U.S. National Museum, V (Hemiptera: Heteroptera)[1]

By Nicholas A. Kormilev[2]

For the privilege of studying the unidentified Aradidae in the collections of the U.S. National Museum, Smithsonian Institution, Washington, D.C., and Ohio State University, Columbus, Ohio, I wish to express my sincere appreciation to Dr. Richard C. Froeschner, Curator, Division of Hemiptera, and Dr. Charles A. Triplehorn, Curator of Insects, respectively. All types of new species are deposited at the U.S. National Museum, except two from the author's collection, which he retains.

In the descriptions, 25 units equal 1 mm. In ratios, the first figure represents the length; and the second, the width of measured part.

All species treated in this paper belong to the Neotropical Region.

Subfamily CARVENTINAE Usinger

Described below are two new apterous species, each in a different genus, from Haiti, and a third, belonging to a third genus, from the island of Dominica, B.W.I.

[1] Previous parts of this same series are: I, Kormilev, 1958, Proc. U.S. Nat. Mus., vol. 109, no. 3413, pp. 209–222; II, Kormilev, 1960, Journ. New York Ent. Soc., vol. 68, pp. 36–47; III, Kormilev, 1964, Proc. U.S. Nat. Mus., vol. 115, no. 3483, pp. 245–258; IV, Kormilev, 1966, Proc. U.S. Nat. Mus., vol. 119, no. 3548, pp. 1–25.

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280-675—68

Drake and Kormilev (1958, p. 243) suppressed the genus *Eretmocoris* Harris and Drake as a synonym of *Acaricoris* Harris and Drake. Usinger and Matsuda (1959, p. 132) separated them and indicated that the former is related more closely to *Aglaocoris* Drake and Maldonado. They further noted that *Acaricoris* is related closely to a new genus that they erected, *Kolpodaptera*. Actually, all four genera are related to each other and, pending a needed revision, I prefer to leave them separate.

Genus *Acaricoris* Harris and Drake

Acaricoris Harris and Drake, 1944, p. 128.

Acaricoris haitiensis, new species

FIGURE 1

FEMALE.—Elongate ovate, rugose, and glabrous; legs with very fine, inclined hairs. Body covered with a very thin layer of whitish incrustation. Apterous.

Head shorter than width across eyes (19:22). Anterior process moderately strong, parallel sided, notched anteriorly; clypeus reaching middle of antennal segment I, much higher than genae, with a small preapical tubercle. Antenniferous tubercles, strong, dentiform, divergent. Eyes globose, protruding, but not pedunculate. Postocular borders strongly converging backward, with a thin, longitudinal carina. Vertex raised in the shape of a trident, with median tooth much shorter than laterals. Laterad of trident with two (1+1) elongate ovate callosities. Antennae slender, one-and-a-half times as long as head width (33.5:22); relative length of antennal segments I to IV 10:7:8.5:8; segments I and II clavate, III slightly tapering toward base, IV fusiform. Labium not reaching base of head; labial groove wide, shallow, open posteriorly.

Pronotum short and wide (12.5:42), separated from mesonotum by a distinct sulcus. Collar thin, straight anteriorly. Anterolateral angles rounded; lateral borders strongly converging forward, slightly sinuate, with two (1+1) small tubercles posteriorly. Posterior border angularly, deeply incised medially, twice (1+1) sinuate laterally. Disc rugose, with two (1+1) subrectangular tubercles anteriorly, separated from each other by a thin median sulcus that becomes much deeper and wider behind them. Along anterolateral borders, from collar to posterior border, extend two (1+1) thin carinae. Mesonotum completely fused with metanotum and terga I–II; the median portion occupied by a spear-shaped elevation with a very thin median sulcus, separated from lateral portions by depressions passing anteriorly into deep sulci. Lateral portions of mesometanotum roundly raised in the middle, discs rugose.

Abdomen almost as long as width across segment IV (64:63), flat; central dorsal plate, consisting of terga III to VI, slightly raised in the middle (area of the first dorsal scent gland scar). Connexivum wide, moderately reflexed. Exterior borders of connexiva straight from II to V, slightly convex on posterior half of VI and VII. Tergum VII with a short, transverse ridge in the middle of posterior border. Spiracles II and III ventral, not visible from above; IV and V sublateral and slightly visible; VI to VIII lateral. Paratergites short, subtriangular, reaching middle of tricuspidate segment IX.

COLOR.—Piceous, partially black; labium and tarsi yellow brown.

MEASUREMENTS.—Total length 4.50 mm, width of pronotum 1.68 mm, width of abdomen 2.52 mm.

HOLOTYPE.—Female, Morne Guimby, 22 km southeast of Fond Verrettes, 6500 feet, Haiti, B. and B. Valentine, 20.VII.1956 (USNM type 69611).

REMARKS.—*Acaricoris haitiensis* is related to *A. ignotus* Harris and Drake but differs by lateral borders of pronotum slightly sinuate and provided with a small tubercle posteriorly, by exterior border of connexivum VI forming a rounded angle and connexivum VII rectangular with rounded tip.

Genus *Eretmocoris* Harris and Drake

Eretmocoris Harris and Drake, 1944, p. 130.

Eretmocoris dominicus, new species

FIGURE 2

MALE.—Subrectangular, parallel sided; females ovate; both sexes flat, heavily punctured and with short, erect bristles on head, borders of the body, antennae, and legs; covered with grayish incrustation.

Head as long as width across eyes (♂, 34:34; ♀, 35:35). Anterior process strong, parallel sided, slightly incised in front, reaching middle of antennal segment I. Clypeus much higher and shorter than genae. Antenniferous tubercles robust, dentiform, strongly divergent. Eyes distinctly stalked. Postocular borders strongly converging backward, with four (2+2) small, round tubercles. Vertex with a raised ridge, which is bifurcate anteriorly and separated laterally and in front by deep sulci; laterad of ridge are two (1+1) ovate, raised, rugose callosities. Neck with two (1+1) small tubercles laterally. Antennae short; relative length of antennal segments I to IV: ♂, 17.5:9:10:9; ♀, 17:10:11:10; I fusiform, robust; II and III slightly tapering toward the base; IV pyriform. Labium reaching hind border of labial groove; latter deep, wide, closed posteriorly.

Pronotum short, wide (♂, 15:49; ♀, 15:55). Collar strong, raised, separated from disc by a deep sulcus. Anterolateral angles produced

into conical lobes, rounded apically, with a row of small, round tubercles. Anterior border with two (1+1) short ridges placed behind collar, separated from each other by a thin, median sulcus. Behind calli median sulcus becomes wider and deeper. Hind border straight laterally, deeply incised in the middle. Disc rugose, partially deeply punctured.

Mesonotum fused with metanotum and terga I and II. Median portion of this plate triangularly raised, with apex inserted into incisure of hind border of pronotum. Mesometanotal plate laterally depressed between mesonotum and metanotum, and raised on metanotum. Disc densely, deeply punctured, particularly in the middle. Lateral borders of mesonotum produced into two (1+1) lobes similar to those of pronotum; lateral borders of metanotum convex, rounded.

Abdomen as long as width across segment V (♂, 74:75; ♀, 90:91). Terga I and II completely fused with metanotum, but separated from central dorsal plate by a deep sulcus. Central dorsal plate consists of terga III to VI completely fused together, raised in area of dorsal scent gland scars, with carinae dividing disc into a few irregular portions; these portions deeply punctured along carinae; tergum III is punctured on the whole surface. Connexivum wide; segments II and III fused; exterior border of connexivum II roundly produced anteriorly; PE angles III to V angularly produced with blunt tip; PE VI and PE VII produced as conical lobes with rounded tip. Tergum VII raised posteromedially. Paratergites short, reaching middle of hypopygium; latter caudal in position, deeply inserted; disc of hypopygium with a short median ridge. In female, tergum VII conically raised posteromedially; paratergites conically produced as far as segment IX; latter truncated posteriorly. Spiracles II ventral; III sublateral; IV to VIII lateral and visible from above.

Color.—Dark brown, shiny, concealed by gray incrustation.

Measurements.—Total length: ♂, 5.64; ♀, 6.84 mm; width of pronotum: ♂, 1.96; ♀, 2.20 mm; abdomen width: ♂, 3.0; ♀, 3.64 mm.

Holotype.—Male, Dominica, W.I., VI.1963, J. Maldonado (USNM type 69612), from Drake collection.

Allotype.—Female, collected with holotype "in copula"; in the same collection.

Remarks.—*Eretmocoris dominicus* is related to *E. gigas* Usinger and Matsuda from which it differs by much smaller tubercles on the neck; by absence of thin projections on the foreborder of pronotum; by conical lobes on lateral borders of pronotum and mesonotum; and by progressively produced PE angles of connexiva.

Genus *Aglaocoris* Drake and Maldonado

Aglaocoris Drake and Maldonado, 1955, p. 291.

FIGURE 3

Aglaocoris drakei, new species

FEMALE.—Elongate ovate, shiny; covered with very short, fine bristles, sparse on body and more numerous on head, antennae, and legs. Body completely covered with a thick, whitish incrustation. Apterous.

Head almost rectangular, shorter than width across eyes (27:30). Anterior process moderately strong, incised anteriorly, genae slightly longer than clypeus, reaching middle of antennal segment I. Antenniferous tubercles strong, acute, diverging. Eyes stalked. Postocular borders forming a right angle, with a round tubercle on its tip. Vertex raised as a bifurcate ridge; laterad of which are placed two (1+1) small, ovate callosities. Antennae slender; relative length of antennal segments I to IV: 13:9:–:– (two apical segments missing); I fusiform, II tapering toward base. Labium short, reaching hind border of wide, deep labial groove, latter closed posteriorly.

Pronotum short, very wide (14:45). Collar thick, separated from disc by a thin sulcus. Anterior borders laterad of collar sinuate; anterolateral angles slightly produced forward, bordered with a dense row of very fine granules. Hind border deeply incised medially. Disc with a transverse carina behind collar, and with a median sulcus behind carina; laterad of median sulcus two (1+1) round callosities; rest of disc irregularly rugose.

Mesonotum wider than pronotum (55:45), medially fused with metanotum and in combination with terga I–II, forming a subtriangular, elevated plate, with tip entering into incisure of hind border of pronotum. Mesonotum laterally separated from metanotum by transverse depressions, which mesad turn backward along triangular plate; lateral disc of mesonotum with round elevation; mesonotum laterally produced far beyond lateral border of pronotum, forming with the latter a rectangular incisure. Lateral borders of mesonotum straight, parallel, very finely granulate.

Abdomen subrectangular, slightly shorter than maximum width across segment IV (65:67.5). Terga I and II flat, completely fused with metanotum but clearly separated from central dorsal plate, which consists of terga III to VI completely fused; disc slightly raised on median line; two (1+1) zigzag carinae separated outside rows of round, calloused spots from disc. Connexivum wide, reflexed. Exterior borders of abdomen straight and parallel from segment II to V, then converging. Connexiva II and III fused; exterior

border of connexivum VI with an elongate, calloused tubercle bearing spiracle; VII with similar, but larger tubercle. Tergum VII raised posteromedially. Paratergites small, conical, blunt, produced as far as segment IX, latter short, truncate posteriorly. Spiracles II to IV ventral, V to VIII lateral and visible from above.

COLOR.—Uniformly yellow brown; clypeus, tips of antenniferous tubercles, antennae, and legs ochraceous.

MEASUREMENTS.—Total length 5.4 mm, width of pronotum 1.8 mm, width of abdomen 2.7 mm.

HOLOTYPE.—Female, Port-au-Prince, Haiti, II.1956, C. J. Drake (USNM type 69613), from Drake collection.

REMARKS.—This new species is dedicated to the memory of my late friend Dr. Carl J. Drake, an eminent American hemipterologist.

Aglaocoris drakei is related to *A. rectangulatus* Usinger and Matsuda from San Domingo but differs by genae with parallel sides; longer antennal segment II (two-thirds as long as I, 9:13); by spiracle VI also placed on a tubercle as is spiracle VII; and by smaller size.

Subfamily ANEURINAE Douglas and Scott

Genus *Aneurus* Curtis

Aneurus Curtis, 1825, pl. 86.

Aneurus haitiensis, new species

FIGURES 4–6

MALE.—Elongate ovate; pronotum finely granulate anteriorly, with a wide, transversely striate band in the middle, and a narrow, striate band along hind border. Scutellum subtriangular, apex broadly rounded.

Head as long as width across eyes (♂, 17:17; ♀, 17:17.5). Anterior process subparallel, rounded anteriorly, reaching to tip of antennal segment I. Genae slightly shorter than clypeus. Antenniferous tubercles short, truncate anteriorly. Eyes semiglobose, protruding. Postocular border forms a right angle, with three minuscule granules laterally. Vertex transversely striate, almost rugose. Two (1+1) large, oblique, ovate callosities mesad of eyes. Antennae moderately slender; relative length of antennal segments I to IV: ♂, 5.5:5.5:5.5:12.5; ♀, 6:6:6:12.5; I obovate, II clavate, III tapering toward base, IV cylindrical. Labium short, not reaching hind border of wide, shallow, transversely rugose labial groove.

Pronotum less than half as long as maximum width (♂, 17:39; ♀, 16.5:39). Collar very thin, sinuate in front. Anterolateral angles subangularly rounded with truncate anterior border and slightly convex lateral border. Lateral notch sharp, forming an obtuse angle.

Lateral borders of hind lobe subparallel, slightly convex, converging anteriorly. Hind border sinuate in the middle, convex laterally. Fore-disc with four (2+2) flat callosities; hind disc with two (1+1) ovate, transverse callosities surrounded by striated areas.

Scutellum flat, concentrically rugose, without callosities.

Hemelytra reaching middle (♂) or hind border (♀) of tergum VII. Corium short, reaching basal one-third of scutellum. Membrane very finely punctured.

Abdomen ovate, longer than maximum width across segment IV (♂, 71:56; ♀, 72.5:54). Connexivum moderately wide, exterior borders of segments straight; PE angles slightly protruding. Paratergites rounded posteriorly, slightly shorter than hypopygium; the latter small, slightly shorter than wide (5.5:6), not produced beyond exterior borders of connexiva VII. In female, paratergites very short, rounded; segment IX slightly convex posteriorly. Spiracles II, VI, and VII lateral, visible from above; III to V ventral; VIII terminal.

COLOR.—Red brown; disc of scutellum lighter; antennae and membrane darker; labium yellow brown.

MEASUREMENTS.—Total length: ♂, 4.92; ♀, 4.96 mm; width of pronotum: ♂, 1.56; ♀, 1.56 mm; width of abdomen: ♂, 2.24; ♀, 2.16 mm.

HOLOTYPE.—Male, Morne Guimby, 22 km southeast of Fond Verrettes, Haiti, 6500′, B. and B. Valentine, 20.VII.1956 (USNM type 69614).

ALLOTYPE.—Female, collected with holotype; Ohio State University collection, Columbus, Ohio.

PARATYPES.—Two males, one collected with holotype, another a day earlier in the same place; in Ohio State University collection and collection of the author.

REMARKS.—*Aneurus haitiensis* is related to the North American *A. pygmaeus* Kormilev from which it may be separated by antennal segment II as long as I or III, antennal segment IV more than twice as long as III, and by larger size.

Subfamily MEZIRINAE Oshanin

Genus *Mezira* Amyot and Serville

Mezira Amyot and Serville, 1843, p. 305.

In my key (1962, p. 260) for American *Mezira* species, 69 of the 71 species were listed. *Mezira horvathi* (Bergroth) and *Mezira novella* Blatchley were excluded because of lack of specimens and insufficient data. Later, three species were described. Now, six new species and one new subspecies are added.

Mezira pusilla, new species

FIGURE 7

FEMALE.—Elongate ovate, with finely setigerous granulations bearing extremely short, curled hairs.

Head almost as long as width across eyes (18.5:19). Anterior process constricted at base, dilated apically; genae forming two (1+1) large, rounded lobes in front of clypeus, reaching to three-fourths of antennal segment I. Antenniferous tubercles acute, strongly divergent. Eyes semiglobose, protruding. Postocular tubercles thin, acute, slightly produced beyond outer border of eyes. Infraocular carinae moderately high, crenulate. Vertex with a U-shaped row of granules. Antennae slender, one-and-a-half times as long as width of head (29.5:19); relative length of antennal segments I to IV: 8:5:9.5:7. Labium reaching to hind border of labial groove, latter closed posteriorly.

Pronotum less than half as long as maximum width (16:36); forelobe narrower than hind lobe (29:36). Collar thin, slightly sinuate anteriorly. Anterolateral angles expanded and rounded, produced forward almost as far as collar. Lateral notch deep, forming a slightly obtuse angle. Lateral borders of hind lobe slightly convex, converging anteriorly. Hind border almost straight. Foredisc with four (2+2) granulate ridges. Hind disc roughly granulate.

Scutellum shorter than basal width (14:20); all borders carinate, apex cut out; lateral borders sinuate at apical half; median ridge cross shaped; disc roughly granulate.

Hemelytra reaching to hind border of tergum VI; basolateral borders of corium straight, carinate; apical angle rounded; apical border convex, slightly sinuate interiorly.

Abdomen longer than maximum width across segment V (60:41). Lateral borders slightly convex. Connexivum wide, slightly raised exteriorly; PE angles slightly protruding; PE VII rounded. Paratergites large, rounded, reaching to middle of a moderately long segment IX, latter incised posteriorly. Spiracles II to VI ventral; VII sublateral, barely visible from above; VIII lateral and visible from above.

COLOR.—Testaceous, partly ferrugineous; labium and tarsi yellow; membrane fuscous, white at base.

MEASUREMENTS.—Total length 4.4 mm; width of pronotum 1.24 mm; width of abdomen 1.64 mm.

HOLOTYPE.—Female, Cacao, Trece Aguas, Alta v. Paz, Guatemala, Barber and Schwarz, (USNM type 69615).

REMARKS.—*Mezira pusilla* is one of the smallest *Mezira* species known from the Neotropical Region, only *Mezira nana* (Champion)

being smaller. In my key (1962, p. 260) for American *Mezira* species, it runs to *M. angustata* (Champion) but is much smaller, genae are expanded and rounded, apical border of corium more convex, paratergites and segment IX are relatively longer.

***Mezira equatoriana*, new species**

FEMALE.—In general aspect similar to *Mezira pacifica* Usinger but differing from it by: Head longer than width across eyes; anterior process shorter, reaching three-fifths of antennal segment I. Eyes relatively large, semiglobose. Postucular tubercles smaller, blunt, adherent to eyes, not reaching outer border of latter; antennal segment III moderately longer than II (15:12), much longer in *M. pacifica* (17.5:10). Pronotum more sinuate laterally; interior ridges of forelobe less raised. Scutellum relatively shorter, wider at base. Apical border of corium almost straight (sinuate interiorly and convex exteriorly in *M. pacifica*). Paratergites with posterior border convex exteriorly and straight interiorly, reaching as far as a short segment IX; latter truncate posteriorly. All spiracles ventral.

COLOR.—Brown; membrane black; antennae and legs lighter, red brown; labium and tarsi yellow brown.

MEASUREMENTS.—Head longer than width across eyes (30:27.5); relative length of antennal segments I to IV: 15:12:15:15. Pronotum less than half as long as wide (26:66); forelobe narrower than hind lobe (52:66). Scutellum shorter than basal width (25:41). Abdomen longer than maximum width across segment IV (92:87).

Total length 7.08 mm; width of pronotum 2.64 mm; width of abdomen 3.48 mm.

HOLOTYPE.—Female, Esmeralda, south of Mateo, Ecuador, J. Foerster, 5.X.1956, deposited in the collection of the author.

***Mezira sanmartini*, new species**

FEMALE.—Elongate ovate, roughly but sparcely granulate; granules with distinct, yellow, curled hairs.

Head distinctly shorter than width across eyes (21:26). Anterior process dilated anteriorly, rounded and incised in front, reaching three-fourths of antennal segment I. Antenniferous tubercles wide, acute, crenulate outside and slightly divaricating. Eyes large, semiglobose, protruding. Postocular tubercles clawlike, acute, produced slightly beyond outer border of eyes. Infraocular carinae high, crenulate. Vertex with a V-shaped, rough, setigerous granulation. Antennae moderately strong; relative length of antennal segments I to IV: 10:6:–:– (two apical segments missing). Labium reaching to hind border of labial groove, latter closed posteriorly.

Pronotum less than half as long as its maximum width (22.5:50); forelobe narrower than hind lobe (43:50), separated from the latter by a deep depression. Collar moderately wide, angularly incised anteriorly. Anterolateral angles strongly expanded, rounded and crenulate, produced anteriorly as far as collar. Lateral notch deep. Lateral borders of hind lobe rounded and crenulate. Foredisc with four (2 + 2) high, granulate ridges. Hind lobe roughly granulate.

Scutellum shorter than basal width (19:26). All borders carinate, tip incised; lateral borders straight, almost without sinus on apical half; median ridge cross shaped; disc roughly granulate.

Hemelytra reaching three-fourths of tergum VI. Basolateral border of corium carinate and crenulate; apical border straight; apical angle rounded; all veins with a rough, setigerous granulation.

Abdomen longer than its maximum width across segment IV (77:60). Midlateral glabrous areas separated from central dorsal plate by high, crenulate carinae. Connexivum wide and raised exteriorly; disc partially covered with whitish incrustation. PE angles barely protruding; PE VII rounded. Paratergites subtriangular reaching three-fourths of segment IX, with a large, lateral spiracle; segment IX slightly incised posteriorly. Spiracles II to VII ventral, on a tubercle far from the border, VIII lateral.

COLOR.—Ferrugineous, partially dark ferrugineous; labium and tarsi orange yellow.

MEASUREMENTS.—Total length 5.72 mm, width of pronotum 2.00 mm, width of abdomen 2.40 mm.

HOLOTYPE.—Female, Magdalena, Estado Bolivar, Rio Cauza, Venezuela, P. San Martin, 5.X.1957, deposited in the collection of the author.

REMARKS.—It is a pleasure to dedicate this species to Mr. Pablo San Martin, an Uruguayan entomologist who collected this specimen and donated it to the author.

Mezira sanmartini runs in my key (1962, p. 260) for American *Mezira* species to *M. sangabrielensis* Kormilev from Amazonas, Brazil, from which it differs by anterior process of head rounded anteriorly, not crenulate; by anterolateral angles of pronotum produced forward as far as collar; by lateral notch of pronotum much deeper and angular; by paratergites (♀) produced only to three-fourths of segment IX; and by setigerous granulation with distinct, yellow, curled hairs.

Mezira paraguayensis, new species

MALE.—Elongate ovate, slightly widening backward; covered with a dense and fine granulation bearing extremely short setae.

Head shorter than width across eyes (♂, 23:25; ♀, 25:27). An-

terior process stout, with large, expanded, and rounded anteriorly genae, contiguous in front of clypeus and produced slightly beyond tip of antennal segment I. Antenniferous tubercles narrow, acute, diverging, reaching to the middle of antennal segment I. Eyes semiglobose, protruding. Postocular tubercles small, acute, produced as far as eyes, or slightly beyond. Infraocular carinae high, thin, finely granulate. Vertex with M-shaped group of granulations. Antennae slender; relative length of antennal segments I to IV: ♂, 9:6:12:7.5; ♀, 9:6.5:12:8.5. Labium short, reaching to hind border of labial groove, latter closed posteriorly.

Pronotum half as long as maximum width (♂, 25:51; ♀, 25:54); forelobe narrower than hind lobe (♂, 43:51; ♀, 44:54). Collar thin, slightly sinuate in front. Anterolateral angles expanded, rounded, slightly reflexed, crenulate, produced forward as far as collar. Lateral notch distinct, forming an obtuse angle. Lateral borders of hind lobe subparallel, converging anteriorly, crenulate; hind border feebly sinuate. Foredisc with four (2 + 2) high, granulate ridges; hind disc more roughly granulate.

Scutellum shorter than basal width (♂, 20:25; ♀, 25:27). Lateral borders carinate, sinuate on apical half; apex widely rounded. Median ridge cross shaped, roughly granulate.

Hemelytra reaching to hind border of tergum VI in both sexes. Corium with convex basolateral borders; apical border convex, rounded; apical angle also rounded. Veins of corium densely granulate.

Abdomen ovate in both sexes; longer than maximum width across segment IV (♂, 74:62.5; ♀, 80:65). Connexivum wide, slightly reflexed exteriorly, exterior borders of segments straight, crenulate; PE angles not, or barely protruding; PE VII angularly rounded in both sexes. Paratergites (♂) small, clavate, reaching slightly over two-thirds of hypopygium; latter cordate, shorter than wide (15:20), with a median ovate ridge not reaching tip of hypopygium. Paratergites (♀) large, rounded, reaching middle of segment IX, latter incised posteriorly. All spiracles ventral, not visible from above.

COLOR.—Piceous with rusty brown granulations; genae, antennae, tips of antenniferous tubercles, lateral borders of forelobe of pronotum, PE angles, and hind borders of connexiva, coxae, trochanters, and tarsi, yellow brown to rusty brown. Exterior borders of connexiva on forehalf, black. Round callous spots on connexiva and venter reddish brown.

MEASUREMENTS.—Total length: ♂, 5.80; ♀, 6.12 mm; width of pronotum: ♂, 2.04; ♀, 2.16 mm; width of abdomen: ♂, 2.50; ♀, 2.60 mm.

HOLOTYPE.—Male, Horqueta, 45 m east of Paraguay River,

Paraguay, Alberto Schulz, 4.VII.1933 (USNM type 69616), from Lutz collection in U.S. National Museum.

ALLOTYPE.—Female, collected with holotype; in the same collection.

PARATYPES.—Two males and one female collected with holotype; in the same and author's collection.

REMARKS.—*Mezira paraguayensis* runs in my key (1962, p. 260) for American *Mezira* species to *M. punctiventris* (Stal) but is much smaller, piceous; granulation is rusty brown, connexivum tricolored, brown, black, and yellowish.

Mezira crenulata, new species

FIGURE 8

MALE.—Elongate ovate, with sharp, setigerous granulation; setae short, rusty, curled; lateral borders of pronotum distinctly crenulate.

Head as long as width across eyes (32:32). Anterior process stout, constricted at base, rounded anteriorly, apex incised in the middle, reaching three-fifths of antennal segment I. Antenniferous tubercles blunt, with convex, subparallel outer borders. Eyes semiglobose, protruding; placed behind the middle of lateral border. Postocular tubercles minute, not reaching outer borders of eyes. Infraocular carinae low, with minute, setigerous granulation. Vertex with V-shaped granulation. Antennae moderately stout; relative length of antennal segments I to IV: 20:12.5:15.5:13. Labium short, not reaching to hind border of labial groove, latter closed posteriorly.

Pronotum half as long as maximum width (37:76); forelobe much narrower than hind lobe (60:76). Collar narrow; anterolateral angles expanded, rounded, and crenulate; lateral notch forming a slightly obtuse angle. Foredisc with four (2+2) high, granulate ridges. Lateral borders of hind lobe convex, crenulate; hind disc granulate; hind border shallowly trisinuate. Granulations bearing distinct, curled, rusty hairs.

Scutellum shorter than basal width (31:37). All three borders carinate; lateral borders sinuate before apex; median carina cross shaped; disc granulate.

Hemelytra reaching slightly over fore border of tergum VII; basolateral border of corium reflexed, slightly sinuate and crenulate; apical angle rounded; apical border convex outside, sinuate interiorly.

Abdomen ovate, longer than maximum width across segment IV (105:98). Connexivum wide; exterior borders of connexiva barely convex; PE angles slightly protruding; PE VII forming a right angle with rounded tip, reaching to the middle of hypopygium. Paratergites thin, clavate, reaching three-fifths of hypopygium; latter cordate,

shorter than wide (20:30), depressed above, with an elevated ovate median ridge not reaching to hind border. Spiracles small, far from border on II to VII; sublateral, but not visible from above on VIII.

COLOR.—Ferrugineous, partly piceous; connexivum concolorous.

MEASUREMENTS.—Total length 8.56 mm, width of pronotum 3.04 mm, width of abdomen 3.92 mm.

HOLOTYPE.—Male, collected in Hoboken, New Jersey, on Orchids imported from Venezuela, 1.VIII.1940 (USNM type 69617).

REMARKS.—*Mezira crenulata*, in my key (1960, p. 260) for American *Mezira* species runs to *M. mexicana* Kormilev but looks more like *M. boliviana* Kormilev from which it differs by spiracles VIII sublateral and not visible from above (lateral and visible in *M. boliviana*); head as long as wide; lateral borders of pronotum distinctly crenulate; hypopygium different: its upper surface produced as far as its lower portion (in *M. boliviana* the upper portion is distinctly shorter than its lower portion).

***Mezira placida*, new species**

MALE.—Elongate ovate, slightly widening backward, then narrowing again; covered with setigerous granulations; setae short and curled. Median ridge of hypopygium reaching to three-fourths its length; paratergites of the female subtriangular with rounded tip, divergent and reaching to one-fourth segment IX. Spiracles II to VII ventral, placed far from border; VIII sublateral, but not visible from above.

COLOR.—Dark ferrugineous, connexivum and venter lighter.

MEASUREMENTS.—Head 22.5:25; relative length of antennal segments I to IV: 10:9:11:10; pronotum 21:51; scutellum 19.5:28; abdomen 80:58 across segment V; hemelytra reaching to foreborder of tergum VII; hypopygium 20:24.

Total length 6.0 mm, width of pronotum 2.04 mm, width of abdomen 2.32 mm.

HOLOTYPE.—Male, Hugural Rd., Puerto Rico, J. R. Johnston, 10.IV.1913 (USNM type 69618).

ALLOTYPE.—Female, collected with holotype; in the same collection.

PARATYPES.—Two males and four nymphs of different instars, collected with holotype; in the same collection and collection of the author.

REMARKS.—This species is based on a series of specimens from Puerto Rico and one series from Haiti. The Puerto Rico series has one specimen with a label "Mezira n.sp., det. H. G. Barber," and the Haiti series has one specimen with a label "Brachyrhynchus sp.?

very near *B. angustatus* Champ. O. H." (presumably by Otto Heidemann).

In my key (1962, p. 260) for American *Mezira* species both series run to *M. granulata* Say. Comparison of both series with a paratype of *M. angustata* (Champion) reveals that they are not related. Comparison with various specimens of *M. granulata* Say shows that they are closely related. The general shape of these two series and *M. granulata* is the same; biometric measurements show the same pattern though the specimens from Puerto Rico and Haiti are slightly larger. The main differences are: postocular tubercles are shorter, not reaching to outer border of eye in specimens from Puerto Rico and Haiti, reaching it in *M. granulata;* lateral notch of pronotum in specimens from Puerto Rico and Haiti is angular, but in *M. granulata* sinuate, rounded, though I have seen specimens of *M. granulata* also with angular lateral notch; paratergites in the female are slightly shorter in specimens from Puerto Rico and Haiti reaching to one-fourth segment IX, while in *M. granulata* they reach to the middle of segment IX; the last but not the least difference is in pilosity: *M. granulata* has setigerous granulation with straight hairs, whereas specimens from both Puerto Rico and Haiti have distinct curled hairs. *Mezira granulata* shows a certain variability in the length of setae; specimens from Texas and Mississippi have setae distinctly longer than specimens from Georgia, or Virginia, but the setae always are straight, never curled.

The differences between specimens from Puerto Rico and Haiti are even smaller. Besides color, which in *Mezira* usually has no specific value, the main difference is the median ridge on the hypopygium: in the specimens from Puerto Rico it reaches three-fourths the hypopygial length, whereas in the specimens from Haiti it reaches to, or almost to, the hind border of the hypopygium.

The best solution is to consider the specimens from Puerto Rico as a new species, herein named *Mezira placida*, new species, and the specimens from Haiti as its geographical subspecies, *M. p. haitiensis*, new subspecies. The following key will separate the two new taxa from each other and from *M. granulata:*

1. Postocular spines produced as far as outer borders of eyes; lateral borders of pronotum mostly roundly sinuate; setigerous granulations with straight setae; paratergites in the female reaching to the middle of segment IX. **Mezira granulata** Say, United States

   Postocular tubercles not reaching to outer borders of eyes; lateral borders of pronotum with an angular notch; setigerous granulations with curled hairs; paratergites in the female reaching to one-fourth segment IX. **Mezira placida**, new species, West Indies

2. Median ridge extending three-fourths length of hypopygium; color dark ferruginous . . . . . **M. placida placida**, Puerto Rico

Median ridge of hypopygium reaching almost to its tip; color testaceous. **M. placida haitiensis,** new subspecies, Haiti

***Mezira placida haitiensis*, new subspecies**

MALE.—Similar to *Mezira placida placida*, but median ridge of hypopygium reaching almost to the tip of the latter.

COLOR.—Testaceous; membrane fuscous, whitish at base; labium and tarsi yellow.

MEASUREMENTS.—Head 21.5:22.5; relative length of antennal segments I to IV: 10:8:11:9; pronotum 22:46; scutellum 19:26; abdomen 73:54 across segment IV; hemelytra reaching one-fifth tergum VII; hypopygium 17:22.

Total length 5.54 mm, width of pronotum 1.84 mm, width of abdomen 2.16 mm.

HOLOTYPE.—Male, Port au Prince, Haiti, E. D. Ball, 1940 (USNM type 69619).

ALLOTYPE.—Female, Port au Prince, Haiti, Herbert Osborn, deposited in the collections of Ohio State University, Columbus, Ohio.

PARATYPES.—Six males, collected with holotype, in the collections of U.S. National Museum and in author's collection; seven males, collected with allotype, in the collections of Ohio State University and in collection of the author.

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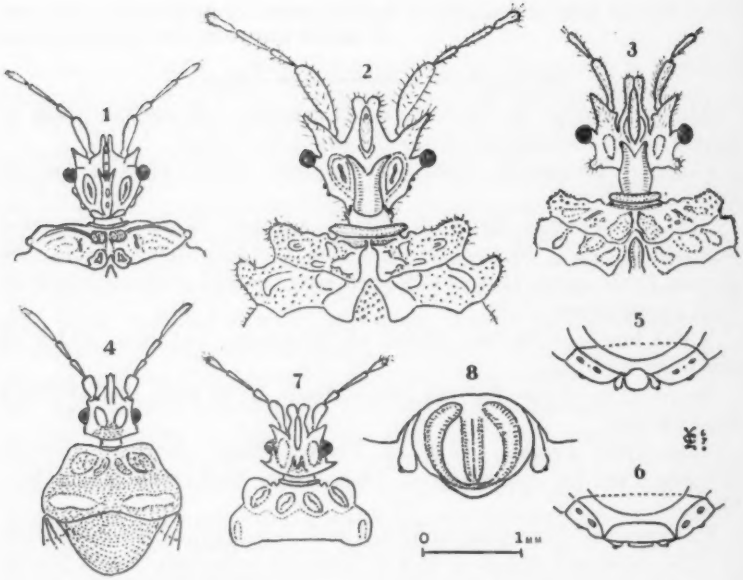

FIGURES 1–8.—1, *Acaricoris haitiensis*, new species, ♀, head and pronotum; 2, *Eretmocoris dominicus*, new species, ♂, head, pronotum, and mesonotum; 3, *Aglaocoris drakei*, new species, ♀, head pronotum, and mesonotum; 4, *Aneurus haitiensis*, new species, ♂, head, pronotum, scutellum, and corium of hemelytra; 5, *Aneurus haitiensis* ♂, tip of abdomen, dorsal aspect; 6, *Aneurus haitiensis* ♀, tip of abdomen, dorsal aspect; 7, *Mezira pusilla*, new species, ♀, head and pronotum; 8, *Mezira crenulata*, new species, ♂, hypopygium, dorsal aspect.

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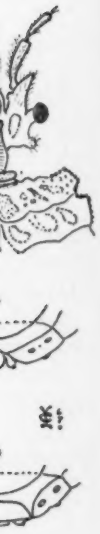

, *Eretmocoris*
drakei, new
species, ♂,
is ♂, tip of
l aspect; 7,
new species,